

ON SOME NON-MARINE HAWAIIAN MOLLUSCA.

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PLATE VII.

SUCCINEA KUHNSI, n.sp. Pl. VII, Fig. 1.

Testa magna et pro genere solida vel soliduseula, opacula, obliqua, conico-ovata, infra ampliata, parum nitens, irregulariter rugosoplicatula, rugis obliquis subflexuosis, lutea vel fulvida, basi et circa aperturam et columellam late et diffuse daucina vel rufo-tincta. Spira producta, apice pallido, mammillato, conoideo. Anfractus 3 convexi, laxe evoluti, sutura perobliqua et prope aperturam praesertim valde descendente ac perimpresa discreti, ultimus maximus, obliquus. Apertura obliqua, superne attenuata, inferne lata. Columella incrassata, regulariter convoluta, longe arcuata sed haud plicifera. Margines callo nitido conspicuo juncti.

Long. 23, diam. 12·5, alt. apert. (oblique) 15 mm.

Hab.—Ka'wicki, Hilo, Hawaii (Kuhns).

Obs.—Variat unicolor, cerasiana, vel granatina, apertura intus ejusdem coloris.

This is a fine robust species, quite variable in colour, as shown above, and often of a quite solid structure. It is a much stronger shell than *S. aurulenta*, Anc., *casta*, Anc., or *Thaanumi*, Anc., also from Hawaii and very distinct from them. It is named after its first discoverer, at the request of Mr. Baldwin, and was subsequently found in the same district by Professor Henshaw and Mr. Thaanum.

SUCCINEA CASTA, Anc.

S. casta, Anc.: Proc. Malac. Soc., vol. iii (1899), p. 272, pl. xii, fig. 10.

Hab.—Olaa, Hawaii, 925 ped. supra mare (Thaanum, Henshaw).

The following forms, although at first sight very different in shape from the typical *casta*, appear to be local varieties, according to Professor Henshaw. I extract the following data from a letter dated April 14th, 1902:—"The shells from 925 feet are from near the type locality of *casta*, and there is no doubt that many from this locality are very different from those above or below. They are much broader, and the spire is less prolonged. Still, there are individuals from this locality that seem to me not separable from the form above. . . . The same striking variation in colour observable in *casta* obtains in *Kuhnsi*. I have found red, white, and parti-coloured shells in the same locality, and even on the same plants. *Thaanumi* again occurs in the three colour varieties, red, white, and parti-coloured."

Var. *OROPHILA*, n.var.

Testa intense luteo- vel saepius late rufo-cornea, concolor, sericio nitens. Spira humilior, apice minus papilliformi. Anfractus $2\frac{1}{2}$.

Hab.—Kaiwiki, Hawaii, 2,500 ped. s.m. (Henshaw).

Var. *HENSHAWI*, n.var.

Testa magis elongata, pyriformis, tenuissima, colore pervariabilis, omnino lutea vel rubra, vel lutea et basi circa columellam late rubrotincta, interdum dorso etiam rubra, spira pallidiore vel rubella. Spira conoidea, papillata, obtusa. Anfractus $2\frac{1}{2}$ celerime crescentes, convexiuseculi, sutura perobliqua divisi, ultimus superne attenuatus, infra ampliatus, lineis incrementi obliquis atque flexuosis subpliciformibus plus minusve obsolete notatus. Apertura obliqua, extus sinuata et basi recedens et effusa. Columella superne vix incrassato-plicatula, dein arcuata.

Long. 14, lat. 8, alt. apert. (oblique) 10, diam. ejusd. 6 mm.

Hab.—Olala, Hawaii, 2,425 ped. supra mare (Henshaw).

SUCCINEA TENERIMA, n.sp. Pl. VII, Fig. 2.

Succ. tenerima, Anc. (nom. nud.): in Baldwin, Cat. Shells Hawaiian Islands, 1893, et in Sykes, Fauna Hawaieensis, 1900, p. 390.

Testa tenuissima, pellucida, virenti-cornea, apice corneo-rubello, subnitida, striis incrementi irregularibus confertisque notata, striis obliquis, in ultimo subflexuosis, oblongo - attenuata. Spira sat producta, apice obtusulo, subpapillato. Anfractus 3 celeriter accrescentes, sutura impressa, valde obliqua separati, convexi; ultimus oblongus, vix obliquus. Apertura ovalis, superne attenuata, obliqua, inferne subdilatata. Columella tenuis, simplex, longe areuata, callo parietali inconspicuo.

Long. 11·5, lat. 6–6·25, alt. apert. (oblique) 7·75, diam. ejusd. 5 mm.

Hab.—Kaiwiki, Hawaii, alt. 2500–2600 ped. s.m. (D. Thaanum, Henshaw).

Var. *COCCOGLYPTA*.

Præcedenti statura, forma et colore testæ simillima, sed apice haud rubello, testa postice paulo magis dilatata præsertim sculptura microscopice plus minusve granulata differt.

Hab.—Hilo, Hawaii (Baldwin).

SUCCINEA APICALIS, n.sp. Pl. VII, Fig. 3.

Succ. apicalis, Anc. (nom. nudum): in Baldwin, Cat. Shells Hawaiian Islands, 1893, et in Sykes, Fauna Hawaieensis, 1900, p. 390.

Testa fragilis, pellucida, luteo- vel spadiceo-virens, apice late et diffuse rubello, sericeo-subnitida, irregulariter lineis incrementi obliquis, dorso subflexuosis, obsoleteque notata, suboblongo-attenuata. Spira sat producta, summo papillato, obtuso, sat minuto. Anfractus 3 convexi, celeriter accrescentes, convexi, sutura impressa; ultimus leviter obliquus, subdilatatus. Apertura obliqua, oblonga, superne regulariter attenuata. Columella tenuis, vix incrassatula, simplex, supra fere haud plicatula, postice longe areuata.

Animal maculis nigris irregularibus pictum.

Long. 13·25, diam. 7·25, alt. apert. (obl.) 9·5, diam. ejusd. 6·25 mm.
Hab.—Makawao, E. Maui (Baldwin).

SUCCINEA TETRAGONA, n.sp. Pl. VII, Fig. 4.

Testa *Succ. quadratae* characteribus plurimis affinis, sed depressior, magis oblonga, virenti-cornea, apice pallido, saepe albescente vel decorticato. Anfractus ultimus magis quadratus, subobliquus, penultimus altior, sutura magis horizontalis, apertura superne magis dilatata et rotundata, ampliata, haud flexuosa, supra subattenuata, vix angulata, marginibus callo tenni sed distincto junctis.

Long. 12, lat. 7·25, alt. apert. 9·5, diam. ejusd. 6·5 mm.
Hab.—Makawao, E. Maui (Baldwin).

SUCCINEA QUADRATA, n.sp. Pl. VII. Fig. 5.

Testa tenuis, subpellucida, confertim et irregulariter rugoso-striata, rufo-cornea, apice decorticato, rubello, oblongo-ovata. Spira mediocris, summo obtuso, papillato, sat magno. Anfractus $2\frac{1}{2}$ valde convexi, sutura obliqua profundeque impressa separati, celeriter accrescentes, embryonali laevi, sequentes flexuose et ruditer rugoso-striati, ultimus magnus, subobliquus, ovato-oblongus. Apertura subobliqua, extns flexuosa, margine extero ante medium distincte sinuato, basali paulum recedente, oblonga, supra parum attenuata. Columella fere simplex vel initio levissime incrassata et subpliciformis, cæterum longe arcuata.

Long. 10·5, lat. 7, long. apert. 8, diam. ejusd. 5·5 mm.

Hab.—Olaa, Kaiwiki, Hawaii (D. Thaanum, Professor Henshaw), 2,550 ped. supra mare.

Obs.—The living shell is often covered with mud, like the preceding species.

MICROCYSTIS RUFOBRUNNEA, n.sp.

Testa globoso-conoidea, tenuis, nitidissima, rufo-brunnea vel cinnamomea, interdum pallidior, imperforata, lineis incrementi perobsoletis. Spira conoidea, obtusa, satis elevata. Anfractus 5– $5\frac{1}{4}$ convexi, regulariter lenteque accrescentes, sutura appressa, lineari. Ultimus utrinque convexus, turgidus, initio solum tantisper subangulatus, cæterum rotundatus, basi centro impressus, imperforatus. Apertura subobliqua, lunata, semicircularis. Peristoma acutum, rectum, marginibus distantibus, columellari minute albo-incrassato, arcuato-declivi.

Diam. maj. 7, min. 6·5, alt. 4·75, alt. apert. 3 mm.

Hab.—Olaa, Hawaii (D. Thaanum).

A fine-coloured shell, like *M. Lymanniana*, Anc., of Oahu, in that respect, but smaller and otherwise quite distinct.

KALIELLA THAANUMI, n.sp. Pl. VII, Fig. 6.

Testa conico-pyramidalis, dilute cornea, fere imperforata, tenuissima, pellucida, nitens, supra striis incrementi confertis sub valida lente sculpta, infra lineis incisis spiralibus numerosis microscopice notata. Spira depresso conoidea, rectilinearis, apice minuto, obtusulo, laevi.

Anfractus $5\frac{1}{2}$ convexi, lente et regulariter accrescentes, sutura impressa, ultimus ad peripheriam angulatus, basi subconvexior. Apertura parum obliqua, transverse oblonga, valde lunata, extus subangulata. Peristoma simplex, acutum, marginibus distantibus, columellari vix angusteque expansiusculo.

Diam. 3·5, alt. 2·5 mm.

Hab.—Olala, Hawaii (D. Thaanum).

Unlike the sharply keeled *K. Konaensis*, Sykes, of the same island. It may perhaps be a *Guppya*, like the following.

KALIELLA LUBRICELLA, n.sp. Pl. VII, Fig. 7.

Differt a praecedente testa minore, supra haud sericeo-micante sed utrinque nitidissima, perforatione magis conspicua etsi punctiformi, spira minus abrupte conica, striis superne obsoletis, laevibus nec capillaribus, anfractu ultimo paulo altiore, obtuse tantum angulato, angulo prope aperturam evanescente, inde apertura ampliore minusque angusta, anfractibus $5-5\frac{1}{4}$.

Diam. 3·2, alt. 2·5 mm.

Hab.—Olala, Hawaii (Thaanum).

VITREA HAWAIIENSIS, n.sp. Pl. VII, Figs. 8-8b.

Differt a *V. Molokaiensi* et a *V. Lanaiensi*, Sykes, testa magis elevata, anfractibus altius convolutis et umbilico paulo minore; a *V. pauxillo*, Gould, cui peraffinis differt etiam testa minus depressa, paulo convxiore, colore pallido luteo-virescente, umbilico profundiore, circulari.

Diam. maj. 4·33, min. 3·66, alt. 2·20 mm.

Hab.—Olala, Hawaii (Thaanum).

AURICULELLA MALLEATA, n.sp. Pl. VII, Fig. 12.

Testa solida, perforata, oblongo-conoidea, nitens, opaca, alba, apice plerumque rufulo vel fuscescente, interdum albo, sinistrorsa, lineis incrementi laevibus sub lente subimpressa. Spira elongatula, convexo-conoidea, apice minuto, obtusiuseculo. Anfractus $6\frac{1}{2}-7$, primi convexiusculi, sequentes planulati, rugis nonnullis elevatis antrorsum descendantibus, more Limnaearum multarum, persaepe malleati. Apertura subauriformis, supra angulata, infra effusa atque recedens, obliqua, lamina parietali subtenui vel medioeri et plica columellari parum prominente, subobtusa, aliquando indistincte duplicata armata. Peristoma crassum, ad basin expansum, extus marginatum, marginibus callo ad junctionem tuberculifero vel intumescente junctis, extero planulato, medio antice subproiecto.

Long. 9, diam. 4·25, alt. apert. (oblique) 4·5 mm.

Hab.—In cacumine montis Kaala (4000' s.m.), insulæ Oahu (Rev. Thwing).

Related to *A. obliqua*, Anc., found on Oahu, but much more slender, malleated, and tinged with brown on the earlier whorls.

AURICULELLA CANALIFERA, n.sp. Pl. VII, Fig. 11.

Testa sinistrorsa, imperforata, ovato-conica, subtenuis, nitens, lineis incrementi obliquis laevibus obsoletisque impressa, unicolor fulva, vel in medio ultimi anfractus zona fusca cingulata, aut etiam intense fulvo-castanea zonaque albescente peripherica suturam supra concomitante circumdata. Spira conica, sat producta, apice obtuso. Anfractus $6\frac{1}{4}$ planiusculi, sutura appressa, ultimus dilatatus, rotundatus, abbreviatus, haud ascendens. Apertura obliqua, irregulariter ovata, infra dilatata, emarginata, lamina parietali compressa, albida, mediocri, intus debiliore armata. Columella appressa, leviter contorto-plicatula, plica albida, extus in spinulam erectam desinente munita, oblique intuenti minute bisinuata. Peristoma tenue, vix nisi ad columellam inerassatum, leviter expansum, marginibus callo simplici nitidoque, haud tuberculifero junctis.

Long. 6·75, lat. 3·6, alt. apert. (oblique) 2·5 mm.

Hab.—Halawa, Molokai (Baldwin).

A very characteristic species, remarkable on account of the features of its columella, and unlike any others in that respect. The shell has the texture of *A. diaphana*, but has a more produced spire, different columella, and is imperforate.

I avail myself of the opportunity of mentioning the locality of *A. expansa*, Pease. It is from Maui.

PARTULINA PHYSA, Newe., var. PHÆOSTOMA, n.var.

Testa nitens, pallide coffea, apice albo, postea tessellato, lineis spiralibus confertis et striis rudibus incrementi notata; apertura et columella brunneæ, fauce micanter, fusca, limbo paulo pallidiore.

Long. 23, diam. 14·5, long. apert. (oblique) 11·5 mm.

Hab.—Hawaii (Thaanum).

AMASTRA LUCTUOSA, Pfr., var. SULPHUREA, n.var. Pl. VII, Fig. 9.

Testa typo similis sed pallide lutea, concolor, prope aperturam vestigiis epidermidis dilute fuscae induita.

Long. 15·5, lat. 9·5, long. apert. 7 mm.

Hab.—Waialae, Oahu (Baldwin).

AMASTRA HENSHAWI, Baldwin. Pl. VII, Fig. 10.

Amastra Henshawi, Bald.: *Nutilus*, vol. xvii (1903), p. 34.

Hab.—Olala, Hawaii, 2,550 ped. supra mare (Professor H. W. Henshaw), S. Kona (Baldwin), alt. 1800–4000 ped.

Related to *A. flavescens*, Newe., which is found in another district.

CARELIA TURRICULA, Migh., var. AZONA, n.var.

Testa similis, cum forma tum characteribus testæ formæ typicæ, ab ea differt colore fuscō, infra nigrescente, sutura inferne pallidiore, ultimo anfractu fascia lutea destituto.

Long. 58·5–60, diam. 19·5–21, alt. apert. 19–19·5 mm.

Hab.—Kauai (Baldwin).

CARELIA FULIGINEA, Pfr., var. SUTURALIS, n.var.

Testa similis typicæ *C. fuligineæ*, sed lineis superficialibus spiralibus in anfractu ultimo magis conspicuus notata; parte supera anfractuum inferiorum late diffuseque albo-luteo marginata, interdum lineis non-nullis spiralibus ejusdem coloris exilibus, infra zonam suturalem cingulata.

Long. 38, diam. 16.5, alt. apert. 18.5 mm.

Hab.—Kauai (Baldwin).

In this variety, the pale band is not well defined as in *C. bicolor*, Jay, which is usually considered as a form of the same species.

NESOPUPA BALDWINI, n.sp. Pl. VII, Fig. 13.

Testa breviter cylindraceo-oblonga, aperte sed minute perforata, fusco-rufa, sericeo-nitidula, præter lineas incrementi tenuissimas, sub valida lente tantum vix conspicuas, sculptura fere destituta. Spira obtusa. Anfractus $5\frac{1}{2}$ convexi, tres primi celeriter diametro crescentes, reliqui subæquales, sutura impressa. Ultimus oblongus, haud tumidus, basi subattenuatus, pone aperturam sulcis duobus parum profundis suturæ parallelis coarctatus, antice leviter ascendens. Apertura verticalis, extus prope medium antice angulatim dilatata, truncato-ovalis, plicis vel lamellis armata, scilicet: parietalibus 2, quarum una angularis, elongata, sed sequente brevior; altera submediaua, paulo magis profunda, longa; columellari 1 acuta, dentiformi; et palatalibus 2 elongatis, sulcis exteris correspondentibus, parallelis, quarum supera marginem fere attingit. Peristoma angustum, concolor, fuscum, subinerassum, vix nisi ad columellam breviter expansiuseulum, marginibus sat remotis, extero parte supera subsinuato.

Long. 1.5, lat. .8, alt. apert. ca. .5 mm.

Hab.—Molokai (Baldwin); Kaupakalua, Maui (Baldwin).

Var. CENTRALIS.

Paulo minor et minus cylindrica, anfractus 5, cæterum typo haud dissimilis.

Hab.—Olala, Hawaii (Thaanum).

NESOPUPA PLICIFERA, n.sp. Pl. VII, Fig. 14.

Testa parvula, ovata, intense rufo-brunnea, tenuiuscula, subnitens, apice excepto oblique et confertim pliculosa, plicis lœvibus, distinetè perforata. Spira obtusa, ovata vel cylindraceo-ovata. Anfractus 5 conspicue convexiuseuli, sutura impressa simplicique, ultimus basi attenuatus et concentrice sulcato-impressus, sulco lamellæ palatali inferæ correspondentे, circa rimam subcompressus. Apertura parum obliqua, basi leviter recedens, ovato-truncata, lamellis instructa, scilicet: parietalibus 2, quorum supera angularis marginem superum attingens et eum margine extero connexa, valde elongata; infera magna, paulo profundius sita et subspiraliter prodiens; columellari 1 parva, acuta, dentiformi; demum palatalibus 2 elongatis, parallelis, supera marginem fere attingente. Peristoma fuscum, incrassatum, anguste expansum,

marginibus distantibus, callo inconspicuo junctis, supero extus subangulatim producto.

Long. 1·5, lat. vix 1, long. apert. ·5 mm.

Hab.—In valle Nuuanu, Oahu (D. Thaanum).

NESOPUPA THAANUMI, n.sp.

Testa dextrorsa, minute rimato-perforata, lète corneo-lutea, nitidula, subpellucida, costulis membranaceis argenteo-micantibus debilibus atque valde deciduis, inter se sat distantibus decorata, subconoideo-ovata, obtusa. Anfractus 4½ convexi, sutura impressa, summo sat minuto; ultimus subsaccatus, basi vix attenuatus, ad finem tantisper ascendens, pone aperturam extus levissime impressus, breviter ovatus. Apertura recta, truncato-ovalis, subrotundata, extus producta et antice sinuata (ante medium partem marginis dextri), lamellis validis albis armata, scilicet: angulari arcuata, elongata sed brevi, marginem attingente, palatali 1 paulo profundiore, longe intrante; columellari 1 transversa, interna, et palatalibus 2, superiore magis extera, ambabus elongatis sed haud valde longis. Peristoma anguste expansum, marginibus sat remotis.

Long. 1·33, lat. 1, alt. apert. ·5 mm.

Hab.—Olaa, Hawaii (D. Thaanum).

Somewhat allied to *N. Newcombi*, Pfr., like the two following, but of lighter colour, and remarkable on account of its white aperture and laminæ. The true *Newcombi*, which seems to be rare, was found by Mr. Thaanum at Waipio pali, Hawaii. It is very globose, very much like *N. admodesta* and *N. acanthinula* in that respect, and the angular lamella is punctiform, reduced to a mere tubercle.

NESOPUPA WESLEYANA, n.sp. Pl. VII, Fig. 16.

Testa oblonga, tenuis, perforata, vix nitida, sub valida lente granulata, fusco-cornea, costulis membranaceis obliquis et distantibus plus minusve deciduis, in ultimo anfractu subflexuosis ornata. Spira oblonga, obtusula. Anfractus 5 convexi, sutura impressa discreti, ultimus oblongus, ad finem tantisper subascendens, basi leviter attenuatus, prope aperturam vix dilatatus. Apertura verticalis, truncato-ovata, basi levissime recedens, $\frac{1}{3}$ altitudinis subaequans, intus fuscula, 5-plicata; peristoma haud continuum, undique expansum et reflexum, crassiusculum, sublabiatum, labio concolore fusco. Plica angularis arcuata, elongata, subflexuosa, parietalis 1 paulo profundior, submediana; columellaris 1 acuta, profunda; palatales 2 elongatae, parallelæ, infera magis profunda.

Long. 2, lat. 1, long. apert. ca. ·75 mm.

Hab.—Hilo, Hawaii (D. Thaanum); Waipio pali, Hawaii (H. W. Henshaw, D. Thaanum); Kaupakalua, Maui (D. D. Baldwin); "Waianae Mountains," Oahu (D. D. Baldwin).

An abundant and widely spread species, which I took at first for the true *Newcombi*, a much more rounded shell, with different lamellæ. Named in honour of the late Dr. Wesley Newcomb, a well-known writer on Hawaiian and West Coast shells.

NESOPUPA KAUAIENSIS, n.sp. Pl. VII, Fig. 17.

Testa suboblonga, abbreviata, corneo-fusca, costulis incrementi confertis et rudiusculis oblique rugulosa, minute perforata, parum nitida, tenuiuscula. Spira obtusa, breviter subcylindrica, attamen leviter conoideo-attenuata. Anfractus 5 convexi, regulariter crescentes, sutura impressa; ultimus breviter ovatus, ventricosus, subsaccatus, antice haud ascendens, lateraliter non compressus, circa umbilicum rotundatus. Apertura leviter obliqua, non sinuata, truncato-subcircularis, haud effusa, plicis dentiformibus ornata, scilicet: parietalibus 2, quarum una angularis parva, tuberculiformis, et secunda mediana aut submediana elongata, profundior, mox desinens; columellari una acuta parva; et palatalibus 2 subæqualibus brevibus, subelongatis, parallelis. Peristoma undique anguste expansum et incrassatum, ad columellam vix magis dilatatum, lividum, marginibus sat distantibus.

Long. 2, lat. 1·33, alt. apert. ·75 mm.

Hab.—Kipu, Kauai (Baldwin).

Differs from *N. Newcombi*, hitherto peculiar to Hawaii, in being more ovate, in the number of whorls, and sculpture.

LYROPUPA LYRATA (Gould).

Pupa lyrata, Gould: Proc. Bost. Soc., i (1843), p. 139; Pfeiffer, Mon. Helic. viv., iii, p. 560, et iv, p. 686, et Verz., p. 177 (*Vertigo*); *Vertigo lyrata*, H. & A. Ad., Gen. ii, p. 172; non *Pupa lyrata*, Boettger, Conch. Mittheilungen, 1883, p. 61, pl. xii, fig. 17 (possibly referable to *L. Magdalena*, Anc.?).

Testa sinistrorsa, ovata, solidula, haud nitida, intense vinoso-fusca, aperte perforata, opaca, summo excepto liris acutis validis, inter se distantibus, obliquis, in ultimo subflexuosis, medio saepe magis prominentibus conspicue costata. Spira oblongo-attenuata, obtusula. Anfractus 5-5 $\frac{1}{2}$ convexi, praeter costas tenuissime et microscopice lineis incrementi notati, sutura undulato-impressa; apicales laevigati, ultimus liris 11-12 instructus, basi pone aperturam constrictis, lateraliiter sulco parum profundo sed distincto, suturæ parallelo impressus, circa umbilicum crista rotundata prædictus. Apertura vix obliqua, parvula, continua, ovato-truncata, supra extus angulata, dein subsinuata, lamellis et plicis obstructa, scilicet: angulari una minutissima, nodiformi, interdum evanescente vel ægre perspicua, supra marginem incipiente; parietali una mediana, profunda, valida, marginem haud attingente; columellari profunda, semilunari; denique palatalibus 2 parallelis, infera profundiore, supera sulco extero correspondente, valde approximatis. Peristoma dilute luteo-fuscum, incrassatum et expansum.

Long. 2·25, lat. vix 1·5, alt. apert. ·66 mm.

Hab.—Olala, Hawaii (Thaanum).

This I consider as the true *Pupa lyrata* of Gould, as it agrees better with his description than any others of the same group. It is quite distinct from my *L. Magdalena*, which Mr. Sykes thinks to be identical, and which is found on Oahu. Dr. Boettger has figured the latter or

a form nearly allied to it, but not Gould's *lyrata*, under the latter name. A very similar form was found in a subfossilized condition in the Waimea district, Hawaii, by Professor Henshaw, and I can scarcely sever it from my species, though it is somewhat less obese and the ripples are stronger.

LYROPUPA CLATHRATULA, n.sp. Pl. VII, Fig. 19.

Testa sinistrorsa, oblonga, rimato-perforata, opaca, subscricea, intense purpureo-nigra, concolor, subtenuis, apice excepto liris acutis lamellosis obliquis, inter se distantibus (12 in ultimo anfractu) sculpta; præterea lineis elevatis membranaceis perparum prominentibus, sed in duobus anfractibus ultimis præsertim, in intervallis cincta et eleganter clathratula. Spira ovata, obtusa. Anfractus 5 convexi, sutura impressa discreti, lineis incrementi sub valida lente notati, ultimus prope aperturam impressione parum distincta suturæ parallela instructus, circa perforationem vix angulatus, ovatus, parum attenuatus. Apertura subobliqua, appressa, irregulariter ovata, superne extus angulata, 5 lamellis vel plicis obstructa, scilicet 2 laminis parietalibus, quarum una submedianâ, libera et secunda brevior, magis extera cum margine conjuncta; columellarî profunda semilunari, oblique intuenti conspicua; palatalibus 2 longis, supera marginem fere attingente, infera magis remota, sulco extero superficiali correspondente. Peristoma expansiuseculum, purpureo-fuscum, marginibus superne approximatis sed haud continuis.

Long. 2·25, lat. 1·5 mm.

Hab.—Olaa, Hawaii, cum præcedente (*Thaanum*).

The fine spiral cuticular ripples recorded in the description are very deciduous, and visible only in very fresh specimens. The species is quite distinct from *L. lyrata* and more like the following.

LYROPUPA CARBONARIA, n.sp. Pl. VII, Fig. 21.

Testa sinistrorsa, ovata, solidula, costulis exceptis haud nitida, intense nigro-fusca, aperte perforata, opaca, summo excepto oblique et valide lirata, liris in medio subarcuatis, basi subflexuosis. Spira oblongo-conoidea, obtusa, apice sat minuto. Anfractus 6 convexi, sutura impressa, ultimus ad aperturam longiuscule tantisper sub-ascendens, basi sulco brevi lamellæ palatali inferæ correspondente constrictus, subattenuatus, antice circa perforationem obtuse subcristatus, liris ca. 17 costatus. Apertura fere recta, cum peristomate fusco-tineta, continua, irregulariter ovato-truncata, supra externe sinuata, tum angulata, lamellis ac plicis coaretata, scilicet: angulari 1 longa, lamelliformi, cum peristomate connexa ac sinulum formante; parietali 1 mediana, præcedenti parallela, profundius posita atque spiraliter volvente; columellarî 1 profunda, semilunari; tandem palatalibus 2, supera longa, suturæ parallela et prope marginem desinente, infera profundiore, breviore, *paululum subdivergente*. Peristoma continuum, undique expansum, subinerassatum.

Long. 2·5, lat. 1·5, alt. apert. vix 1 mm.

Hab.—In valle Nuuanu, prope Honolulu, Oahu (*Thaanum*).

Another modification of the same type, of very dark colour.

LYROPUPA MAGDALENÆ, Anc.

Hab.—Palama, Oahu (Baldwin). Also young examples from the Waianae Mountains, Oahu, and from Honolua, Maui, may belong there.

LYROPUPA MIRABILIS, Anc. Pl. VII, Fig. 18.

Hab.—Waianae Mountains, Oahu (Baldwin); Waimea, Hawaii (Prof. H. W. Henshaw), subfossil.

LYROPUPA MICROTHAUMA, n.sp. Pl. VII, Fig. 20.

Testa præcedente minor et minus cylindracea, scilicet magis conoideo-oblonga; anfractibus 5, margine supero externe minus producto, lamella angulari magis elongata et distincta, palatali supera elongata, prope marginem exterum subabrupte truncata, infera magis elongata, haud guttiformi, præcedenti haud omnino parallela, sed paulatim autrorum divergentea præterea differt.

Long. 1'8, lat. 1, long. apert. .66 mm.

Hab.—In valle Nuuanu, ins. Oahu (Thaanum).

The smallest of the group.

LYROPUPA STRIATULA (Pease).

Insufficiently characterized, but probably distinct from *lyrata*.

Hab.—Hawaii (Pease).

LYROPUPA PERLONGA, Pease. Pl. VII, Fig. 15.

Hab.—Oahu (Pease); Kauai (Perkins); an extinct crater of the Kona coast, Hawaii (Baldwin); Waimea district, Hawaii (Professor Henshaw).

The specimens from Hawaii were all dead and subfossil, though some are in good condition. As I have no specimens from Oahu for comparison, their identification is somewhat doubtful, but they agree fairly well with Pease's shell.

BIFIDARIA LYONSIANA, Anc.

Hab.—Punahou, Oahu (Lyons), also Waianae Mountains, Oahu (Baldwin); Lahaina, Maui (Baldwin).

BIFIDARIA PEDICULUS, Shutt., var. NACCA, Gld.

Hab.—Punahou, near Honolulu, Oahu (Baldwin); Hawaii (Gould); Waipio valley, Hawaii (D. Thaanum).

HELICINA BALDWINI, n.sp. Pl. VII, Fig. 24.

Testa conoideo-lenticularis, solidula, subnitidula, sub epidermide tenui lutescente vel ochracea sordide alba, vertice rubello vel luteo, lineis incrementi tenuibus sub lente sculpta, et stria unica parum impressa supra angulum medianum sita et suturam sequente exarata. Spira conoideo-depressa, vertice minuto. Anfractus fere 5, planulati, superiores subexserti, ultimus ad peripheriam biangulatus, angulo

inferiore altero valde approximato, infra medium sulco exili circumcinetus, basi convexus. Callum basale lividum, intus luteum, granulatum. Apertura obliqua, subtriangularis, angulo extero rotundato. Peristoma simplex, rectum, margine columellari cum basali angulum rotundatum effidente.

Diam. maj. 6, min. 5·66, alt. 4, alt. apert. (oblique) 3·25 mm.

Hab.—Kipu, Kauai (D. D. Baldwin).

The largest species hitherto found in the Sandwich Islands, but of the same general type.

HELICINA DISSOTROPIS, n.sp. Pl. VII, Figs. 22, 23.

Testa lenticularis, utrinque depresso-convexa, solidula, subnitidula, striis capillaribus incrementi sub lente oblique sculpta, acute carinata, rubella, supra infraque ad callum basalem albo strigata. Spira depressa, late conoidea, apice obtuso. Anfractus 4 plani, superiores exserte carinati, sutura parum profunda; ultimus superne plano-declivis, præter earinam superam altera illæ approximata et interdum tertia minus distincta circumdatus. Callum circumscriptum, granulatum, lividulum. Apertura obliqua, supra regulariter declivis, extus angulata, basi subarcuata. Peristoma acutum, basi vix expansiusculum.

Diam. 4·2, alt. 2·25, alt. apert. (oblique) fere 2 mm.

Hab.—Oahu (Thaanum).

A distinct species of compressed form and with two or three acute keels on the last whorl. Surely not a variety of *H. Sandwichensis*, Souleyet, of which I have typical specimens from the Waianae Mountains, Oahu (D. D. Baldwin). Some subfossil examples also are in my hands from Waimea, Hawaii (Henshaw).

HELICINA SULCULOSA, n.sp. Pl. VII, Fig. 25.

Testa parva, subgloboso-conoidea, solidiuscula, subnitens, lineis incrementi obsoletis, prope aperturam perspicuis oblique notata, præterea sulcis linearibus distantibus 5–8 circumdata (duobus superioribus anfractus superiores quoque cingentibus), rubella, concolor vel prope suturam pallido maculata. Spira conoidea, acutiuscula. Anfractus 4, inferiores convexiusculi, sutura parum profunda; ultimus supra convexo-declivis, basi convexus, haud carinatus, ad peripheriam initio vix angulatus. Callum basale circumscriptum, elevatum, tenuiter granulatum, lividum, breve. Apertura obliqua, subtriangularis, extus angulatim rotundata. Peristoma simplex, vix basi expansiusculum. Operculum testaceum, lividum, crassiusculum, ad partem sinistram anguste rubro-marginatum.

Diam. 3·33, alt. 2·5, alt. apert. 1·5 mm.

Hab.—Olāa, Hawai‘i (Thaanum).

MELANIA TAHTENSIS, Pease, var.

Hab.—Lahaina, Maui (Baldwin). Identified by Dr. Brot, and new for the Sandwich Islands. I have similar specimens received from the Museum Godeffroy as collected in the Society Islands.

EXPLANATION OF PLATE VII.

FIG. 1. *Succinea Kuhnsi*, n.sp.
 ,, 2. " *tenerima*, n.sp.
 ,, 3. " *apicalis*, n.sp.
 ,, 4. " *tetragona*, n.sp.
 ,, 5. " *quadrata*, n.sp.
 ,, 6. *Kaliella Thaanumi*, n.sp.
 ,, 7. " *lubricella*, n.sp.
 ,, 8-8b. *Vitrea Hawaiensis*, n.sp.
 ,, 9. *Amastra luctuosa*, Pfr., var. *sulphurea*, n.var.
 ,, 10. " *Henshawi*, Baldwin.
 ,, 11. *Auriculella canalifera*, n.sp.
 ,, 12. " *malleata*, n.sp.
 ,, 13. *Nesopupa Baldwini*, n.sp.
 ,, 14. " *plicifera*, n.sp.
 ,, 15. *Lyropupa perlonga*, Pease.
 ,, 16. *Nesopupa Wesleyana*, n.sp.
 ,, 17. " *Kanaiensis*, n.sp.
 ,, 18. *Lyropupa mirabilis*, Anc.
 ,, 19. " *clathratula*, n.sp.
 ,, 20. " *microthauma*, n.sp.
 ,, 21. " *carbonaria*, n.sp.
 ,, 22, 23. *Helicina dissotropis*, n.sp.
 ,, 24. *Helicina Baldwini*, n.sp.
 ,, 25. " *sulculosa*, n.sp.